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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,529	10/31/2001	Thomas P. Hager	25145A	8583
22889	7590	08/25/2004	EXAMINER	
OWENS CORNING			GRAY, JILL M	
2790 COLUMBUS ROAD			ART UNIT	
GRANVILLE, OH 43023			PAPER NUMBER	

1774

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,529

Applicant(s)

HAGER ET AL.

Examiner

Jill M. Gray

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 17, 2004 has been entered.

Response to Amendment

The rejection of claim 6 under 35 U.S.C. 112 second paragraph, as being indefinite is withdrawn in view of applicants' amendments.

The rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by Fernyhough et al, 5,700,417 is moot due to applicants' amendments.

The rejection of claims 1-5 under 35 U.S.C. 102(b) as being anticipated by Levy is moot in view of applicants' amendments.

Claim Objections

Claim 23 is objected to because of the following informalities:
"comprising" should be "comprises". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1774

Claims 2-5, 23, and 27-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, these claims are indefinite due the presence of the word "type". The addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. MPEP 2173.05(b) *Ex parte Copenhagen*, 109 USPQ 118 (Bd. App. 1955).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6 and 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernyhough et al, 5,700,417 (Fernyhough) in view of Olesen et al, 4,956,039 (Olesen) for reasons of record.

Fernyhough teaches a fiber reinforced rod comprising a plurality of fibers coated with a UV curable resin material, which can be vinyl ester and an outer topcoat. See column 2, line 18 and column 5, lines 5-6 and 17-18. In addition, Fernyhough teaches that his UV curable resin can be blended with copolymers of ethylene with esters of acrylic acid, acrylic copolymers, copolymers of ethylene with vinyl esters of carboxylic acids, polybutylene terephthalate and various other copolymers and derivatives. See column 3, lines 16-67. As to the specific outer

Art Unit: 1774

topcoat layer, Fernyhough teaches that copolymers of polybutylene terephthalate can be added to the resin. It should be noted that the language of "comprises" does not exclude the blends taught by Fernyhough. As to claims 23-28, Fernyhough specifically teaches polyethylene terephthalate fibers and aramid fibers and mixtures of these with glass fibers. See column 4, lines 34 and 37-38. Fernyhough is silent as to the specific glass fibers. Regarding claims 2-5, while Fernyhough is silent as to the specific type of glass fibers used, it would have been obvious to choose any fibers with the reasonable expectation of success in the absence of unexpected properties that are directly related to the specific glass fibers. Moreover, the teachings of Olesen would have provided motivation to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fernyhough by forming a glass fiber reinforced rod wherein E-glass or S-glass fibers are used, as is known in the art. As to claim 6, it is the examiner's position that the teachings of Fernyhough would encompass any UV curable vinyl ester resin material known in the art including those of the type contemplated by applicants. As to claim 29, Fernyhough teaches that copolymers of ethylene and esters of acrylic and methacrylic acid can be used. This teaching would have provided a suggestion to the skilled artisan that ethylene acrylic acid copolymer could be used.

Therefore, when considered as a whole, the combined teachings of Fernyhough and Olesen would have rendered obvious the invention as claimed in present claims 2-6 and 23-29.

Art Unit: 1774

Claims 1-6 and 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levy et al, 4,479,984 (Levy) in view of Fernyhough et al, 5,700,417 (Fernyhough).

Levy teaches multifilament bundles impregnated with an ultraviolet curable resin to form a composite material suitable for use as a strength member in optical fiber cables. The filaments can be KEVLAR yarn, E-glass or S-glass rovings, as required by claims 2-5. See Table III. In addition, Levy teaches that a secondary coating may be applied around the composite. See column 10, lines 37-39. Levy does not teach the specific topcoat composition or mixtures of filaments.

Levy and Fernyhough each teach strength members comprising UV cured vinyl ester resin matrix material having a plurality of elongated fiber members encased therein, and wherein an outer topcoat can be applied thereto. As to claim 6, the teachings of Fernyhough at columns 2 and 3 would have provided a suggestion to the skilled artisan that any UV curable vinyl ester resin material could be used with the reasonable expectation of success. As to the topcoat of claim 1, Fernyhough teaches that polybutylene terephthalate can be added to the resin material. It is the examiner's position that this teaching would encompass polybutylene copolymers as well. In addition, it should be noted that the language of "comprises" does not exclude the blends taught by Fernyhough. As to claims 23-28, Fernyhough specifically teaches polyethylene terephthalate fibers and aramid fibers and mixtures of these with glass fibers. See column 4, lines 34 and 37-38. This teaching would have provided motivation to the skilled

Art Unit: 1774

artisan to modify the teachings of Levy by forming a composite rod comprising a mixture of filaments, said mixture being glass and aramid fibers or glass and polyethylene terephthalate fibers. As to a plurality of E-glass fibers and S-glass fibers, this limitation is a matter of design choice, and not construed to be matter of invention. Moreover, it would have been obvious to use a mixture of the two types of glass fibers to obtain the efficacious properties associated therewith, namely, the added strength of S-glass fibers and reduced cost of E-glass fibers. As to claim 29, Fernyhough teaches that copolymers of ethylene and esters of acrylic and methacrylic acid can be used. This teaching would have provided a suggestion to the skilled artisan that ethylene acrylic acid copolymer could be used.

Therefore, when considered as a whole, the combined teachings of Levy and Fernyhough would have rendered obvious the invention as claimed in the present claims.

Response to Arguments

Applicant's arguments filed August 4, 2004 have been fully considered but they are not persuasive.

No claims are allowed.

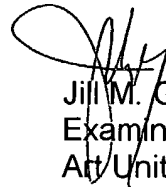
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax

Art Unit: 1774

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Examiner
Art Unit 1774

jmg